

each species will be collected and individually processed into skin-off fillet and fillet-less carcass samples. Multiple composite samples consisting of three-five whole body yearling smallmouth will be collected from each station in **Table 3.2**.

Fish samples will be collected once during 1999, in late summer/early fall near the end of the caged SPMD exposure period. Adult fish will be analyzed for total PCBs and lipid content, while yearling smallmouth bass will be analyzed for PCB congeners and tissue lipid content. The purpose of analyzing yearling smallmouth bass for PCB congeners is to further identify additional sources of PCB loadings to the river after remediation has occurred. All fish will be processed by the MDEQ Surface Water Quality Division, and fillet tissues will be analyzed for total PCBs and lipids by their designated laboratory. Whole-body yearling smallmouth bass composites will be analyzed for PCB congeners and lipids by the laboratory contracted to MDEQ.

3.5 Sediment Sampling

Three types of sediment samples will be collected; bedded sediments, bedload sediment, and settling sediment; at the stations listed in **Tables 3.1 and 3.2**. SOPs describing each sediment sampling technique are included in **Appendix C**.

Bedded sediment - sediment deposited on the stream bed - will be collected using 2-meter lengths of cellulose acetate butyrate (CAB) plastic core tubes. A battery-powered, hand-held vibrocore unit will be used to drive the core tubes into the sediment until refusal (i.e., until the core tube no longer penetrates the sediment). Core tubes will be cut open and the upper 6" collected. This is believed to be the biologically active sediment layer. Five equally spaced cores will be collected from the length of shore sampled for resident fish.. The upper layers from each core will be composited into a single sample representing the electrofishing zone.

Bedded sediment samples will be collected once in 1999 at the stations listed in **Table 3.2**, in late summer/early fall, under dry weather conditions, during the resident fish sampling.

Bedload sediment - sediment transported by a stream on or immediately above its bed - will be sampled using a bedload sampler under wet weather conditions at the 5 locations at which wet weather water samples will be collected (**Table 3.1**). Samples will be collected once during 1999, under wet weather conditions.

Settling sediment - sediment which settles from the water column to the stream or lake bed, usually due to a change in hydrodynamic conditions - will be sampled using a sediment trap. Three samples will be collected from each impoundment listed in **Table 3.1** once during 1999, during one wet weather event.